



WBDG

WHOLE BUILDING DESIGN GUIDE

National Institute of Building Sciences

June 2-5, 2002

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NIBS Enabling Legislation

Public Law 93-383, Sect. 809 (1974)



Public Law 93-383
93rd Congress, S. 3056
August 22, 1974

An Act

To establish a program of community development bank growth, to amend and extend laws relating to housing and urban development, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Housing and Community Development Act of 1974".

Housing and
Community Dev-
elopment Act
of 1974,
42 USC 1302
note.

NATIONAL INSTITUTE OF BUILDING SCIENCES

42 USC 1302j-6. Sec. 809. (a)(1) The Congress finds (A) that the lack of an authoritative national source to make findings and to advise both the public and private sectors of the economy with respect to the use of building science and technology in achieving nationally acceptable standards and other technical provision for use in Federal, State, and local housing and building regulations is an obstacle to efforts by and imposes severe burdens upon all those who procure, design, construct, use, operate, maintain, and retire physical facilities, and frequently results in the failure to take full advantage of new and useful developments in technology which could improve our living environment; (B) that the establishment of model buildings codes or of a single national building code will not completely resolve the problem because of the difficulty at all levels of government in updating their housing and building regulations to reflect new developments in technology, as well as the irregularities and inconsistencies which arise in applying such requirements to particular localities or special local conditions; (C) that the lack of uniform housing and building regulatory provisions increases the costs of construction and thereby reduces the amount

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Congressional Rationale

- ❑ no authoritative source of advice on science and technology
- ❑ a serious and widespread lack of uniformity in building criteria
- ❑ unnecessary barriers against the use of innovative building systems



NIBS Responsibilities

- Development, promulgation, and maintenance of performance criteria, standards, and other technical provisions
- Evaluation and prequalification of building technology
- Conduct needed investigations
- ***Assembly, storage and dissemination of technical information***



Membership Categories

□ Public Sector

- Consumer
- Architects
- Engineers
- Federal Government
- State Government
- Local Government

□ Private (Industry) Sector

- Building Construction
- Labor Organizations
- Housing
- Product Manufacturers
- Standards
- Real Estate, Finance and Insurance
- Research & Testing



Governance

- NIBS' Governing Structure
 - Established by Authorizing Legislation
 - Requires a 21 Member Board of Directors
 - 15 Members elected by the Board representing industry categories
 - 6 Members selected by President of US with Senate confirmation
 - Required that Majority Must Represent Public Interest



Councils and Committees

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- ❑ Board of Directors
 - ❑ Consultative Council
 - ❑ Building Environment and Thermal Envelope Council
 - ❑ Building Seismic Safety Council
 - ❑ Construction Metrication Council
 - ❑ Facility Information Council
 - ❑ Multi-hazard Mitigation Council
 - ❑ Facility Maintenance and Operations Committee
 - ❑ National Clearinghouse for Educational Facilities
 - ❑ International Alliance for Interoperability
 - ❑ **Whole Building Design Guide Board and Advisory Committee**

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WBDG Board of Direction

- Department of Defense
- Naval Facilities Engineering Command
- Army Corps of Engineers
- Air Force
- General Services Administration



WBDG Advisory Committee

- Department of Defense
- Naval Facilities Engineering Command
- Army Corps of Engineers
- U.S. Air Force
- General Services Administration
- Department of Veterans Affairs
- National Aeronautics and Space Administration
- Federal Emergency Management Agency
- National Institute of Standards and Technology
- Department of Energy
- Department of State
- National Institutes of Health
- U.S. Access Board
- Department of Interior
- Environmental Protection Agency



Past Conditions

- ❑ Expensive Criteria Replication and Duplication
- ❑ Expensive Criteria Coordination
- ❑ Expensive Criteria Storage
- ❑ Expensive Criteria Distribution
- ❑ Redundant and Uncoordinated Efforts



Construction Criteria Base (CCB)

- Primary criteria distribution system for
 - Army Corps of Engineers
 - Naval Facilities Engineering Command
 - Air Force
 - Guard and Reserve Units
 - General Services Administration, NASA and others
- CD-ROM, DVD, Website
- Over 12,000 documents
- Over 15 years
- Over 40,000 users



Current Conditions

- Budget reductions
- Criteria similarities
- Reduced expertise
- Reliance on private sector criteria
- Redundant efforts



WBDG Goal

... to provide a web portal for the
uniform access and use of facility
information in a ***knowledge based***
management environment.



WBDG Objectives

- Implementation of ***unified design guidance*** to allow for the sharing and consolidation of criteria, procedures and dissemination.
- ***Partnering and integration*** of public and private sector efforts through the use of federal/private sector criteria



- Provide single point access
- Provide public/private sector integration
- Promote unified/consolidated criteria
- Promote shared criteria development
- Facilitate criteria review and revision
- Reduce criteria development and distribution costs



WBDG Structure

- Design Objectives

- Aesthetic
- Safe
- Sustainable
- Functional
- Productive
- Durable
- Cost Effective
- Accessible

- Building Types

- Systems and Products

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Whole Building Design Guide Demonstration



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